SMECC Regional

Carbon County

Information for You

- Standards Review: Refreshing the Standards
- SAGE
- UAMTE
- UCTM
- PAEMST

Standards Review: Elementary Refreshing the Standards

- Committees:
  - Steering Committee
  - Standards Review Committee
  - Grade Bands/Statistics Committee
- Emerging Themes
- Timeline:
  - Mid-January
  - Board meeting: February
  - 90 day review period

Standards Review: Secondary Refreshing the Standards

- Committees:
  - Steering Committee
  - Standards Review Committee
  - Grade Bands/Statistics Committee
- Emerging Themes
- Timeline:
  - Mid-January
  - Board meeting: February
  - 90 day review period

SAGE

- Instructional Implications:
  - Teaching methodologies: Peg Smith- Cognitive Demand
  - Cognitive Rigor: Karin Hess' Cognitive Rigor Matrix (Webb and Bloom)
- SAGE Formative Trainings
- Course Progressions in High School (next slide)

SAGE

Course Progressions in Secondary Mathematics

SAGE Interim and Summative Eligibility

Students are eligible for SAGE Interim and Summative assessments depending on the courses they are enrolled in.

Test Assignment Core Codes can be found at:

http://www.schools.utah.gov/assessment/Testing-Director-Resources.aspx

SAGE

Course Progressions in Secondary Mathematics

Can Students "Test Up?"

Students are eligible for SAGE assessments for the courses they are enrolled in.

A student may test at a higher grade-level if the student is enrolled in the appropriate course and has received instruction for that course. Students should have taken all prior grade/course-level tests. **Students should follow the recommended course sequence directed through Teaching and Learning.**

E.g., 8th grader taking Secondary Math I must be enrolled in the Secondary Math I course and should already have a score for 8th grade math.

http://www.schools.utah.gov/CURR/mathsec/Core/High-Ability-Students-and-the-Mathematics-Common-C.aspx

UAMTE

- Recommendations
- Licensing

UCTM

- Conference 2014
  - 607 attendees
  - Phil Daro/Ignite! Presenters
- Conference 2015
  - Steve Leinwand
  - Principles to Action**
  - Ignite Presenters

PAEMST: https://www.paemst.org/

This year: Secondary Mathematics– Nominations are open!!

The application consists of three components: Administrative, Narrative, and Video.

The components allow the applicant to provide evidence of deep content knowledge and exemplary pedagogical skills.

Each application will be evaluated using the following five Dimensions of Outstanding Teaching:

- **Mastery of mathematics** or science content appropriate for the grade level taught.
- **Use of instructional methods and strategies** that are appropriate for students in the class and that support student learning.
- **Effective use of student assessments to evaluate, monitor, and improve student learning.**
- **Reflective practice and life-long learning** to improve teaching and student learning.
- **Leadership** in education outside the classroom.

PAEMST: https://www.paemst.org/

- PAEMST winners are announced and honored the year following the receipt of the application.
- Each awardee receives a certificate signed by the President of the United States and a $10,000 award from NSF. Awardees and their guests are honored during events that take place in Washington, DC. These events include an award ceremony, celebratory receptions, professional development programs, and discussions with policy-makers on how to improve mathematics and science education.

Professional Development
Implementation of Utah Core
Principles to Actions: Mathematics Teaching Practices

- Implementation and Core Standards Review: How does knowing the intended curriculum assist us in proper implementation?

- Mathematics Teaching Practices: Build procedural fluency from conceptual understanding.

Professional Development
Principles to Action: Teaching Practices

- **Build procedural fluency from conceptual understanding.**
- Effective teaching of mathematics builds fluency with procedures on a foundation of conceptual understanding so that students, over time, become skillful in using procedures flexibly as they solve contextual and mathematical problems.

Professional Development
Principles to Action: Teaching Practices

- **Build procedural fluency from conceptual understanding.**
- Effective teaching of mathematics builds fluency with procedures on a foundation of conceptual understanding so that students, ***over time***, become skillful in using procedures flexibly as they solve contextual and mathematical problems.

Professional Development
Principles to Action: Teaching Practices

- **Build procedural fluency from conceptual understanding.**
- **Conceptual understanding…**
  - How do strategies allow for conceptual understanding?
  - Purpose for various strategies

- Let's look at a *Progression of Learning*

Progression of Learning K-2:
Build procedural fluency from conceptual understanding

- Using the Utah Core, determine the standards that build conceptual understanding in grades K-2 that allow for procedural fluency for the following two standards:
- 2.NBT.5: Fluently add and subtract within 100 using strategies based on…
  - …
  - …
  - …
- 3.NBT.2: Fluently add and subtract within 1000 using strategies and algorithms based on…
  - …
  - …
  - …

Progression of Learning K-2:
Build procedural fluency from conceptual understanding

- Using the Utah Core, determine the standards that build conceptual understanding in grades K-2 that allow for procedural fluency for the following two standards:
- 2.NBT.5: Fluently add and subtract within 100 using strategies based on…
  - Place value
  - Properties of operations
  - Relationship between addition and subtraction
- 3.NBT.2: Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

Progression of Learning K-2:
Build procedural fluency from conceptual understanding

- Using the Utah Core, determine the standards that build conceptual understanding in grades K-2 that allow for procedural fluency for the following two standards: 2.NBT.5 and 3.NBT.2
- 3.NBT.2: Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.

Professional Development
Principles to Action: Teaching Practices

- **Build procedural fluency from conceptual understanding.**
- Effective teaching of mathematics builds fluency with procedures on a foundation of conceptual understanding so that students, ***over time***, become skillful in using procedures flexibly as they solve contextual and mathematical problems.

Feedback from You!

- Professional Development
- Principles to Action: Teaching Practices
- Other